

# 6CQ4

## Half-Wave Vacuum Rectifier

### GENERAL DATA

#### Electrical:

Heater Characteristics and Ratings (*Design-Maximum Values*):

Voltage (AC or DC) . . . . .  $6.3 \pm 0.6$  volts

Current at heater volts = 6.3 . . . . . 1.600 amp

Peak heater-cathode voltage:

Heater negative with respect to cathode<sup>a</sup> . . . . . 5500<sup>b</sup> max. volts

Heater positive with respect to cathode . . . . . 300<sup>c</sup> max. volts

Direct Interelectrode Capacitances (Approx.):<sup>d</sup>

Plate to cathode and heater . . . . . 8.5  $\mu\text{f}$

Cathode to plate and heater . . . . . 11.5  $\mu\text{f}$

Heater to cathode . . . . . 4  $\mu\text{f}$

#### Mechanical:

Operating Position . . . . . Any

Type of Cathode . . . . . Coated Unipotential

Maximum Overall Length . . . . . 3-13/16"

Maximum Seated Length . . . . . 3-1/4"

Maximum Diameter . . . . . 1-9/32"

Bulb . . . . . T9

Bases (Alternates):

Intermediate-Shell Octal with External Barriers:

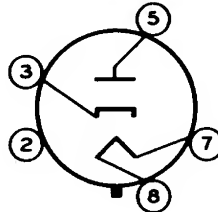
5-Pin, Arrangement 2 (JEDEC Group 1, No.B5-147)

Short Intermediate-Shell Octal with External Barriers:

5-Pin, Arrangement 2 (JEDEC Group 1, No.B5-85)

Basing Designation for BOTTOM VIEW . . . . . 4CG

Pin 2 - Do Not Use<sup>e</sup>  
Pin 3 - Cathode  
Pin 5 - Plate



Pin 7 - Heater  
Pin 8 - Heater

### DAMPER SERVICE

Maximum Ratings, *Design-Maximum Values*:

*For operation in a 525-line, 30-frame system<sup>f</sup>*

PEAK INVERSE PLATE VOLTAGE<sup>a</sup> . . . . . 5500 max. volts

PEAK PLATE CURRENT . . . . . 1200 max. ma

DC PLATE CURRENT . . . . . 190 max. ma

PLATE DISSIPATION . . . . . 6.5 max. watts

Characteristics, *Instantaneous Value*:

Tube Voltage Drop for plate ma. = 250. . . . . 25 volts



RADIO CORPORATION OF AMERICA  
Electron Tube Division

Harrison, N. J.

DATA  
5-62

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- a This rating is applicable when the duty cycle of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.
- b The dc component must not exceed 900 volts.
- c The dc component must not exceed 100 volts.
- d Without external shield.
- e Socket terminals 1, 2, 4, and 6 should not be used as tie points.
- f As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

